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REMARKS

The application has been reviewed in light of the Office Action dated November 20, 2006. Claims 1-46 and 49 were pending, with claims 47 and 48 having previously been canceled, without prejudice or disclaimer. By this Amendment, new dependent claims 50-52 have been added, and claim 1 has been amended to clarify the claimed subject matter, without narrowing a scope of the claim. Accordingly, claims 1-46 and 49-52 are now pending, with claims 1, 5, 9, 12, 15, 20, 23, 28, 31, 35, 39 and 49 being in independent form.

Claims 1-46 and 49 were rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over U.S. Patent No. 6,665,425 to Sampath et al. in view of U.S. Patent No. 6,181,886 to Hockey et al.

Applicant has carefully considered the Examiner's comments and the cited art, and respectfully submits that independent claims 1, 5, 9, 12, 15, 20, 23, 28, 31, 35, 39 and 49 are patentable over the cited art, for at least the following reasons.

Sampath, as understood by Applicant, proposes an approach for automated diagnosis and remediation of a document processing system based on analysis of operational data (job data and machine data) from the system or from a database and based on image quality tests. The diagnostic results can be displayed to a user, such as a customer or a service engineer. If the diagnostic results indicates problems, the machine can enter a predetermined repair sequence.

As acknowledged in the Office Action, Sampath does not teach or suggest, however, several features of the present application, including (1) automatically detecting a status of usage of a consumable product in the apparatus and supplied by a service depot, (2) sending a report for reporting a completion of supplying the consumable product on the apparatus when the detector detects that the consumable product is refilled, the request including the identification of the

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apparatus, and (3) sending a request for supplying the consumable product including the identification of the apparatus, the specification of the consumable product, and the identification of the service depot, as provided by the subject matter of claims 1, 9, 15, 23, 31 and 39.

Further, contrary to the contention in the Office Action, Sampath also fails to teach or suggest sending a request for supplying the consumable product to the manager using the electronic communications address when the detector detects that the consumable product is nearly ended, as provided by the subject matter of claims 1, 9, 15, 23, 31 and 39.

Hockey, as understood by Applicant, proposes a system for collecting used toner in an electrostatographic recording system, and monitoring the collection of the used toner.

The Office Action cites Hockey, column 1, line 61 through column 2, line 3, column 6, lines 49-63, and column 7, lines 24-43.

Hockey, column 1, line 48 through column 2, line 3, states as follows in relevant part:

In accordance with one aspect of the present invention there is provided an electrostatographic machine for replenishing toner and collecting used toner in which the apparatus comprises ... a collection container for collecting used toner removed from a recording member, and a controller for tracking a first accumulated driver operating on-time and being programmed to compare the first accumulated operating on-time with a first pre-programmed value for determining when the container is to be emptied or to be replaced and providing a signal to indicate that the container is full or to be emptied or to be replaced. The signal to indicate that the container is full or to be emptied or to be replaced may enable a display to indicate to the operator such a condition exists or may set a flag or other signal in memory that can be accessed by a service person either at the machine or remotely. The signal may be used to generate a phone call via a modem to a service person.

Hockey, column 6, lines 39-65, states as follows in relevant part:

The concept of accumulating the replenishment motor on-time can also be applied to the cleaning subsystem. By continuously accumulating the replenishment motor on-time, the amount of toner delivered to the toning station is known based upon the replenishment delivery rate. Toner delivered to the station can exit the station in one of

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two modes, first through dusting (which is a relatively small amount) and secondly through development of the latent image on the film loop. The majority of the toner on the photoconductor is transferred to paper for delivery to the customer. Any toner remaining on the photoconductor after transfer is cleaned from the photoconductor via the cleaning subsystem and transported to the collection bottle. Through testing, a relationship can be determined between the amount of toner collected by the cleaning subsystem, and the amount of toner delivered from the replenisher. For a given amount of replenishment motor on-time, it can be determined how much longer the replenishment motor can be on until the cleaning subsystem's collection bottle is full. Incremental warnings can be logged to the machine, service person and/or the customer to identify the state of the collection bottle. Eventually, when the bottle is determined to be full, the machine can display a message to notify the service person, or the machine can notify the service person directly, if the machine is so equipped. Once the bottle has been emptied, a software reset is performed and the replenishment on-time counter begins from zero.

Hockey, column 7, lines 24-43, states as follows in relevant part:

... A new error code is logged and stored as a flag in the LCU's memory. A message is also displayed to contact service. The accumulation counter in the LCU's memory is reset when the toner collection bottle 48d is emptied. This can be detected by removal of the collection bottle and replacement of the collection bottle at the cleaning station or where the bottle is located, there being a switch which senses such removal and replacement and provides appropriate signals to the LCU. As noted above, the values of C1 and C2 are determined experimentally. Upon the accumulated replenishment motor on-time being greater than C1, a message may be provided on the OCP that the toner collection bottle should be emptied at a convenient time. The value of C2 is chosen based on experiments which indicate that this value can be used to assume that the toner collection bottle is full and needs to be emptied. When the LCU detects that the collection bottle has been emptied and replaced, the memory which stores accumulated replenishment motor on-time relative to accumulation of toner in the collection bottle is reset and the machine is restored to the ready state step 270.

Thus, Hockey is concerned with the collection of used toner, and proposes keeping track of the on-time of the used toner accumulation mechanism to determine when servicing should be requested.

The level of toner in a hopper is monitored in the apparatus of Hockey, and when the level is low a message is displayed on an operator control panel.

However, contrary to the contention in the Office Action, Hockey, like Sampath, does not

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teach or suggest sending a request for supplying the consumable product to the manager using the electronic communications address when the detector detects that the consumable product is nearly ended, as provided by the subject matter of claims 1, 9, 15, 23, 31 and 39. In addition, Hockey, like Sampath, does not teach or suggest of course that the request for supplying the consumable product includes the identification of the apparatus, the specification of the consumable product, and the identification of the service depot, as provided by the subject matter of claims 1, 9, 15, 23, 31 and 39.

Further, while Hockey proposes that a signal is sent when the collection container (for collecting used toner) is full to indicate that the container should be emptied, Hockey, like Sampath, does not teach or suggest sending a report for reporting a completion of supplying the consumable product on the apparatus when the detector detects that the consumable product is refilled, as provided by the subject matter of claims 1, 9, 15, 23, 31 and 39.

Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claims 1, 9, 15, 23, 31 and 39, and the claims depending therefrom, are patentable over the cited art.

For similar reasons, Sampath and Hockey fails to teach or suggest (a) automatically detecting an event indicative of a defect in a maintenance component being used in the apparatus, (b) sending a request for the repair service to the manager and the service depot using the respectively registered electronic communications addresses when the detector detects the event, (c) sending a report for reporting a completion of the repair service on the apparatus when the detector detects no defect of the maintenance component, and (d) the request includes the identification of the apparatus, the specification of the maintenance component, and the identification of the service depot, as provided by the subject matter of claims 5, 12, 20, 28, 35 and 39.

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In addition, the cited art also fails to teach or suggest that the controller determines based on details of the defect whether to send the request to both the manager and the service depot or only to the manager (claim 51), and when the request is sent by e-mail to the manager and the service depot, a service depot address is inserted in a To: field of the e-mail, and a manager address is inserted in a Cc: field of the e-mail (claim 52).

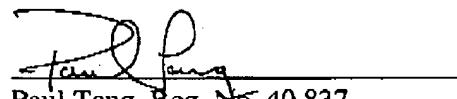
Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claims 5, 12, 20, 28, 35 and 39, and the claims depending therefrom, are patentable over the cited art.

In view of the remarks hereinabove, Applicant submits that the application is now in condition for allowance. Accordingly, Applicant earnestly solicits the allowance of the application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Patent Office is hereby authorized to charge any fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,

  
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